Docket Number (Optional) **Application Number** 15977-3 10/646.502 (Use several sheets if necessary) Applicant(s) Sungho Jin Group Art Unit Filing Date 08/23/2003 2812 **U.S. PATENT DOCUMENTS** DOCUMENT NUMBER CLASS SUBCLASS REF DATE (MM-YYYY) NAME IF APPROPRIATE 05-2000 345 74.1 6,069,599 Py et al. 313 6,411,020 310 06-2002 Yaniv et al. Friedmann et al. 427 6,103,305 08-2000 249.7 4,149,076 04-1979 Albert 378 98.6 6,545,425 04-2003 Victor 315 169.3 6,297,063 10-2001 Brown et al. 438 2 429 231.8 6,465,132 10-2002 Jin 6,538,367 03-2003 Choi et al. 313 309 5,566,704 05-2003 Choi et al. 257 314 6,664,727 12-2003 Nakamoto 313 495 01-2004 Lee et al. 427 249.1 6,673,392 6,741,019 05-2004 Filas et al. 313 355 5,982,095 11-1999 Jin et al. 313 582 OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.) Zhu et. al., "Large Current Density from Carbon Nanotube Field Emitters." Applied Physics Letters, Vol. 75, No. 6, pgs. 873-875 (1999) Betzig, E. et al., "Near-Field Optics: Microscopy, Spectroscopy, and Surface Modification Beyond the Diffraction Limit", Science, Vol. 257, pgs 189-195 (July 10, 1992) Cheng et al., "Bulk morphology and diameter distribution of single-walled carbon nanotubes synthesized by catalytic decomposition of hydrocarbons", Chem. Physics Letters, Vol. 289, pg. 602-610 (1998) Date Considered 9 Examiner Signature EXAMINER! Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through

Form PTO-A820 (also form PTO-1449)

citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

				Docket Number (Optional) Application Number 15977-3 10/646,502					
INFORMATION DISCLOSURE CITATION (Use several sheets if necessary)				Applicant(s) Sungho Jin					
				Filing Date 08/23/2003	Group # 2812	Group Art Unit 2812			
			Ü.	S. PATENT DOCUMENTS					
EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE (MM-YYYY)	NAME	CLASS	SUBCLASS	FILING IF APPROI	F	
RB		5,079,112	01-1992	Berger et al.	430	4			
		5,532,496	07-1996	Gaston	250	492.22			
		5,629,790	05-1997	Neukermans et al.	359	198			
		5,701,014	12-1997	Berger et al.	250	492.22			
		6,028,689	02-2000	Michalicek et al.	359	224			
		6,201,631	03-2001	Greywall	359	245	1		
		2002/0146853	10-2002	Karpov et al.	438	20			
	-	6,401,526	06-2002	Dai et al.	73	105			
		6,525,461	02-2003	lwasaki et al.	313	495			
		2003/0071246	04-2003	Grigorov et al.	252	500			
		6,692,568	02-2004	Cuomo et al.	117	84			
		2003/0230753	12-2003	Stecki et al.	257	89			
	-	2002/0158342	10-2002	Tuominen et al.	257	784	<u></u>		
		5,904,561	05-1999	Tseng	438	643			
77		6,653,228	11-2003	Choi et al.	438	637			
	<u> </u>		FOR	EIGN PATENT DOCUMENTS			<u></u>		
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	-	OTUER	DOCUMENTS /	  ncluding Author, Title, Date, Pertin	ant Pages Ftc.)			<u></u>	
	1			ics Letters, "Continuous		f aligned ca	arbon		
TZZ		nanotubes: a s	tep closer to	commercial realization",	Vol. 303, pgs	s. 467-474 (	1999)		
73				rganized formation of hex of Applied Physics, Vol. 7			nodic		
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INI	IIAL	KEF		(MINI-YYYY)				APPROP	RIATE				
R	B	-	2003/0034244	02-2003	Yasar et al.	204	192.3						
			6,062,931	05-2000	Chuang et al.	445	24						
	Τ		6,333,968	12-2001	Whitlock et al.	378	136						
			5,399,860	03-1995	Miyoshi et al.	250	310						
			6,489,349	12-2002	Thomas et al.	250	423F						
		-	6,512,235	01-2003	Eitan et al.	250	423F						
R	$\sqrt{\mathcal{V}}$		6,660,959	12-2003	Vallance et al.	219	121.18						
FOREIGN PATENT DOCUMENTS													
EYA	MINER	REF	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	TRANSLA Yes	TiON				
	INITIAL												
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)													
10	3	Li, A.P. et al., Journal of Applied Physics, Vol. 84, No. 11 Pgs. 6023-6026 (19				30)							
/		-	Scott, A.W., Understanding Microwaves, Ch. 12, pgs. 282-317 (1993)										
						Spindt, C.A. et al., "Field-Emitter-Array Development For High Frequency Operation," J. Vac. Sci., Technol. B, Vol. 11, pgs. 468-473 (1993)							
							quency						
			Operation," J. V	/ac. Sci., Tec	hnol. B, Vol. 11, pgs. 468-4	73 (1993)		cal					
			Operation," J. V	/ac. Sci., Tec		373 (1993) synthesized	by a physi	cal					
		-	Operation," J. V Kong, Y.C. et al vapor depositio (2001) Tsai, C.L. et al.,	'ac. Sci., Tec ., "Ultraviole n approach" "Blas effect	hnol. B, Vol. 11, pgs. 468-4 t-emitting ZnO nanowires s , Applied Physics Letters, on the growth of carbon n	173 (1993) synthesized Vol. 78, No. anotips usi	by a physi 4, pp 407-4	Ve					
		-	Operation," J. V Kong, Y.C. et al vapor depositio (2001) Tsai, C.L. et al.,	'ac. Sci., Tec ., "Ultraviole n approach" "Blas effect	hnol. B, Vol. 11, pgs. 468-4 t-emitting ZnO nanowires s , Applied Physics Letters,	173 (1993) synthesized Vol. 78, No. anotips usi	by a physi 4, pp 407-4	Ve					
		-	Operation," J. V Kong, Y.C. et al vapor depositio (2001) Tsai, C.L. et al., plasma chemica 721-723 (2002)	/ac. Sci., Tec ., "Ultraviole in approach" "Blas effect al vapor depo 'In₂O₃ nanow	t-emitting ZnO nanowires s , Applied Physics Letters, on the growth of carbon n psition", Applied Physics L	synthesized Vol. 78, No. anotips usin	by a physi 4, pp 407-4 ng microwa 81, No. 4, p	ve pp.					
12	3	-	Operation," J. V Kong, Y.C. et al vapor depositio (2001)  Tsai, C.L. et al., plasma chemica 721-723 (2002)  Li, Chao et al., 'Vol. 82, No. 10,  Rouse, Ambros	/ac. Sci., Tec., "Ultraviole in approach" "Blas effect al vapor depo 'In₂O₃ nanow pp 1613-161! io A. et al., "	t-emitting ZnO nanowires s , Applied Physics Letters, on the growth of carbon n psition", Applied Physics L	synthesized Vol. 78, No. anotips usin etters, Vol.	by a physi 4, pp 407-4 ng microwa 81, No. 4, p	ve op.					
Exam	niner S	- Signatu	Operation," J. V Kong, Y.C. et al vapor depositio (2001)  Tsai, C.L. et al., plasma chemica 721-723 (2002)  Li, Chao et al., Vol. 82, No. 10,  Rouse, Ambros Physics Letters	/ac. Sci., Tec., "Ultraviole in approach" "Blas effect al vapor depo 'In₂O₃ nanow pp 1613-161! io A. et al., "	t-emitting ZnO nanowires so, Applied Physics Letters, on the growth of carbon nosition", Applied Physics Letters as chemical sensors" (2003)	synthesized Vol. 78, No. anotips usin etters, Vol.	by a physi 4, pp 407-4 ng microwa 81, No. 4, p	ve op.					
EXA citati	MINER	t: Initi	Operation," J. V Kong, Y.C. et al vapor depositio (2001)  Tsai, C.L. et al., plasma chemic: 721-723 (2002)  Li, Chao et al., Vol. 82, No. 10,  Rouse, Ambros Physics Letters	"Blas effect al vapor deporting 1613-161! io A. et al., " , Vol. 76, No.	t-emitting ZnO nanowires standard Applied Physics Letters, on the growth of carbon nosition", Applied Physics Letters as chemical sensors (2003)  Field emission from molyb 18, pp. 2583-2585 (2000)	synthesized Vol. 78, No. anotips usin Letters, Vol. , Applied Photogram carbon with MPEP So	by a physi 4, pp 407-4 ng microwa 81, No. 4, p nysics Lette pide", Appli	ers,	hrough				